WESTMINSTER

July 15, 2003

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Department of
Public Works
and Utilities

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Ms. Dyan Foss
Kaiser-Hill, L.L.C.
Rocky Flats Environmental Technology Site
10808 Highway 93, Unit B, T124A
Golden, Colorado 80403-8200

Re: Proposed Modifications to the Rocky Flats *Decommissioning Operations Plan (DOP) for Building 771/774*, dated June19, 2003

Dear Dyan:

On behalf of the City of Westminster, I am submitting the following comments on the *771 Closure Project Decommissioning Operations Plan Modification 5* (DOP Modification). The City appreciates the opportunity to provide feedback on this proposed change in the decontamination strategy for Building 771 and Building 774 (B771/774), and we look forward to receiving your written reply. Wording in italics in this letter are quotes from the DOP.

This proposal to decontaminate the basements to the radionuclide action levels represents a significant departure from the earlier plan to decontaminate the entirety of both buildings to the free release standard, and we appreciate the discussions we have had to date. The City appreciates the many meetings that have been had with us to discuss the proposal to decontaminate the foundations and/or basements of B771 and B774 to the radionuclide action levels. We want to emphasize, as we did in our previous meetings, that this approach should not set precedence for other buildings. To allow contaminated basements and/or foundations to remain will have long-term stewardship responsibilities, especially if the foundations are within areas of shallow water tables.

We understand that the remediation of B771/774 is interrelated with a number of issues, including groundwater movement and contamination, erosion potential, hill slope stability, final land configuration, and proximity to B371 and B776/777. We require additional information pertaining to the groundwater modeling scenarios and the potential for seeps to form and in addition, we require a more detailed engineering design of the backfill operations, proposed land configuration design to ensure the stability of the area over time, and details of the groundwater management systems to evaluate the proposal. We look forward to receiving this information in a timely manner as it is developed.
The City supports the proposal based on the following items being addressed and evaluated prior to demolition of B771 and B774.

C. IHSS's that are not yet characterized that overlie OPWLs will provide adequate characterization of soils for all other OPWLs. In addition, the RFETS groundwater monitoring network required by ALF Section 3.4 provides analytical data on the presence and mobility of subsurface soil column contaminants. Action determinations for groundwater contamination are made in accordance with ALF Section 3.3. Samples for OPWL will extend to 8 feet below the surface in order to quantify any remaining contamination.

If plutonium concentration is >3 nCi/g between 3 and 6 feet below the surface and the areal or volumetric extent of contamination exceeds the trigger values provided in Table A14-1,DOE shall remove radionuclide contamination to less than 1 nCi/g.

Table A14-1

Contamination Level (nCi/g)	Areal Extent Limit (m^2)	Volume Extent Limit (m^3)	Step-out Sample Locations
7	0	0	None
6	40	25	2m x 5m
5	50	31	2m x 6m
4	60	37	2m x 7.5m
3	80	50	2m x 10m

Areal or volumetric extent of contamination will be determined based on the "step-out" sampling approach described in Sections A & B and Table A14-1. An accelerated action would be triggered if plutonium contamination exceeds the values in Table A14-1 or if contamination from other contaminants of concern pose a lifetime excess cancer risk greater than $1x10^{-5}$or a Hazard Index >1.

D. An attempt will be made to perform plutonium speciation in the soil contaminated by OPWL leaks at each of 3 locations where known leaks have occurred. This will be done to determine the mobility profile of plutonium in the soil directly around the leaks.

E. DOE will remove valve vaults down to a minimum of 6 feet below the surface. Valve vaults deeper than 6 feet below the surface will be removed to the extent practicable giving due consideration to the safety of workers (there are approximately 30 total valve vaults). DOE will follow the ER RSOP Notification process for valve vault removal. Practicality is based on three aspects, listed in order of priority - safety, technical, and cost/benefit. These aspects are not necessarily independent. For example, while a condition may arise that makes removing a valve vault unsafe or not technically feasible using normal methods, safety or engineering measures could be implemented to complete the job safely. However, the cost may be prohibitive when weighed against the potential benefit to the refuge worker and the environment. Safety considerations are predominantly associated with confined spaces and working in deep excavations. Technical feasibility includes prohibitions of layback due to other structures and groundwater level. The practical approach includes the following:

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Section 4.4.2, Decontamination, page 23

"The Building 771/774 slab and structure within 0 to 6 feet of the final proposed grade will be decontaminated to the unrestricted release criteria and 0 to 3 feet will be removed during demolition."

Because of the uncertainties of what final land configuration will be and what effect erosion will have, if any, change the above to read, "...and 0 to 6 feet will be removed during demolition." Make this change anywhere else in the document that the above is stated in order to be consistent. This will allow for a safer margin of error if erosion or the final land configuration has an effect on the area.

It is anticipated that if the contamination is surficial, it will generally be decontaminated. If the contamination extends several inches into the concrete, the concrete will generally be removed, if it exceeds the 7 nCi/g.

Delete the word "generally". Westminster will not approve of any contamination above 7 nCi/g to remain on the slab. In addition, we also request insta-coat be applied to the concrete slab to serve as an encapsulant for the residual contamination.

Make a reference to or include the details of Table A14.1, from the final RFCA, Attachment 14 as a third bullet here.

Section 4.5, Under Building Characterization, page 26

This section identifies a deviation from the Industrial Area Sampling and Analysis Plan (IASAP). The IASAP requires an 11-meter statistical grid to determine sampling locations. The DOP states the grid was enlarged to a 22-meter statistical grid because emphasis was placed on biased sampling at sumps and tanks. Westminster does not consider this deviation from the IASAP acceptable. Provide us with the revised data quality objectives and revision to the IASAP to allow for the revised sampling protocol.

Section 4.6, Pre-Demolition Survey, page 27

The City wants to again emphasize the need to have Independent Verification and Validation (IVV) performed of the pre-demolition survey and of the characterization of the remaining slab left with residual contamination. The independent verification and validation will ensure us that adequate analysis and characterization has been performed to document the amount of residual contamination remaining post-closure. Add a section to the DOP that will address the IVV process.

Section 4.7.1.8, Demolition of the Main Building 771 Structure, page 35

"Site restoration activities will be conducted after a no further accelerated action has been obtained for under building contamination. Backfill operation may be conducted by decommissioning or environmental restoration and details on the activity will be contained in work packages. The requirement for the backfill activity will be based on the groundwater modeling and land configuration to provide a relatively stable surface suitable for a wildlife refuge.

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Backfill operations may involve soil, recycled concrete and/or flowable fill. Sections 4.7.3 and 5.5 contain additional details on the potential backfilling methods."

We are concerned site restoration (i.e., short-term revegetation) will not be conducted until a no further accelerated action has been approved by the regulators. Short-term revegetation plans should be in place and performed once demolition has been completed and backfill operations have been conducted. This is necessary in order to begin to control the erosion process that will develop on an unvegetated hillside. The DOP should include short-term restoration/revegetation criteria.

Section 4.7.2, Demolition of the Stack, page 36

"A number of options for demolition and controls are being considered and will be discussed at the ER/D&D status meetings, as it is available."

Change this sentence to read as follows:

"A number of options for demolition and controls are being considered and will be discussed at the ER/D&D status meetings, the Rocky Flats Coalition of Local Governments Monthly Meeting, and the Rocky Flats Citizens Advisory Board Monthly Meetings. At a minimum, it is anticipated that presentations and information exchanges will occur before the finalization of the demolition plan and demolition initiation."

Section 4.7.3, Demolition of the Tunnels, page 37

Westminster does not agree with the proposed methodologies for abandoning the two tunnels in place. The two tunnels, which are the exhaust tunnel between B771 and the stack, and the second tunnel between B771 and B776 are in areas with shallow water tables. The tunnels should be removed or collapsed so that they do not pose any future groundwater problems. Both tunnels could act as conduits for groundwater flow and generate seeps or cause groundwater to flow away from the proposed groundwater treatment unit. With the additional potential environmental impacts from the remaining residual contamination on the slabs to groundwater, Westminster recommends the tunnels be removed or collapsed so that we can support the Sites' proposal for B771/774.

Section 4.7.4, Project Cleanup, Demobilization, and Post-Demolition, page 37

"Based on groundwater modeling and land configuration, methods may be necessary to direct the groundwater. The decommissioning project will install these groundwater management systems before demobilization and during backfill operations if the systems are not related to groundwater remediation activities, but are to maintain the stability of the area over time. It is anticipated that the groundwater control measures could include french drains, erosion control matting, and/or groundwater flow through areas punched through the Building 771/774 superstructure."

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Add a section to the DOP to include the details of the groundwater management systems for the B771/B774 project. Include the details of the cover for the slab, the french drains, and how groundwater flow will be managed.

Will the holes impact the integrity of the superstructure? Clarify how groundwater flow through the holes will not increase the potential for erosion of the concrete, thus releasing contaminated particles into the groundwater.

Clarify if the footer drains will be left in place as per the B771/B774 plan or if they will be dispositioned per the Environmental Restoration RFCA Standard Operating Protocol (ER RSOP). Provide Westminster with characterization data of the footer drain. If the footer drains or sumps are contaminated, what are the plans to utilize the footer drains or sumps?

Section 4.7.4, Project Cleanup, Demobilization, and Post-Demolition, page 38

Erosion controls should be identified in the DOP to ensure the stability of the hill slope. The details of the drainage layer and where the flow from this layer will be directed should be identified in the DOP. What is the final slope of the hillside? An Erosion Control Plan should be developed and approved for this area prior to remediation. Add the Erosion Control Plan as an appendix to the DOP.

The DOP states "*the near term recommendations will be reevaluated in subsequent closeout reports for all actions taken.*"

Clarify the reevaluation process and what the data quality objectives are. Identify the document that will determine the monitoring and inspection of the area prior to the final grading and successful vegetation of the area.

Westminster does not agree with the statement that "*after final grading and successful vegetation of the area, no specific long-term stewardship activities are recommended beyond the generally applicable Site requirement that may be imposed on this are in the future*".

Inspections will still have to be performed to inspect for erosion, seeps, sluffing, subsidence, or protruding slabs. Delete the statement that no specific long-term stewardship activities will be needed and refer to the Erosion Control Plan of the DOP. Before demolition of B771/B774 the design of the french drain, disposition of the footer drains, and specifics of the permeable layer should be identified.

To ensure long-term protection and viability of this proposal and integration with the northern Industrial Area, Westminster expects to be involved with final stewardship decisions. We anticipate the details of the stewardship analysis will be provided to us so we are able to make informed decisions associated with the protection of water quality. We anticipate further dialogue regarding stewardship and the enforceability of the long-term stewardship criteria. We anticipate the specific criteria will be addressed in closure documents such as the CAD/ROD or

other post-closure documents, and we anticipate that appropriate placeholders will be included in the DOP.

Section 6.1.1, Clean Closure, page 45
Clarify why direct radiological surveys, no matter what the activity, will allow a unit to be clean closed under RCRA. If a RCRA unit is clean closed, you have to document the absence of contamination or decontaminate the unit. Provide Westminster with the specific RCRA units that will not be clean closed and remain in the B771/B774 area and provide the City with a copy of the contact letter from the regulators approving such an activity.

Section 8, Environmental Consequences
Clarify why impacts from disposition activities at the site are analyzed with other cumulative activities such as nearby gravel pit operations. Was this approach utilized in previous National Environmental Policy Act (NEPA) analyses at the site?

Prior to the demolition of B771/774, the short-term revegetation and erosion controls measure should be in place and included in the DOP as mentioned previously.

Section 8.3, Water Quality, page 56
"In addition, some groundwater will flow through the fill due to the infiltration of direct rainfall on the surface of the fill. This groundwater will flow vertically and then horizontally (to the North) within the footprint of the building. To reduce the possibility of a surface seep from this groundwater, a permeable layer (like gravel or crushed concrete) will be placed over the top of the concrete slab that remains in place. This will control the groundwater level within the footprint of the building to greatly reduce the possibility of a surface seep. The details of the drainage layer and where the flow from this layer will be directed is still under evaluation and will be addressed as a part of the groundwater modeling at Building 771/774."

We continue to be concerned with the work planning and execution of protecting surface water from contaminated groundwater within the area. The B771/B774DOP is not specific enough to address the potential degradation of groundwater or surface water. The plan does not address how run-on and run-off will be addressed when areas are being remediated with contaminated slabs or adjacent to contaminated areas that will not be remediated until a much later date.

In previous meetings, we supported the proposal based on additional information being provided to us to make an informed decision. The Site made a commitment to provide us with information such as the groundwater modeling and land configuration design for this area. Please provide us with the additional information we requested to evaluate the impact to surface water quality in this area.

We also request additional information performed by the Actinide Migration Evaluation group such as the effect of actinide transport in the presence of

volatile organics or uranium. With americium as the key contaminant for B774, will contaminant migration be enhanced? .

The groundwater modeling, backfill design, and land configuration plan will provide the City with the data and information to determine the need for additional groundwater wells in the area. D&D wells have been established in the area and the new backfill plan may require the need to relocate the D&D wells.

Section 10.4, Decommissioning Closeout Report
Long-tern stewardship needs to be addressed or referenced in the closeout report.

Finally, again Westminster appreciates the public process the Site has developed with the D&D projects. We also appreciate the numerous meetings the Site has given the City to educate us and help us to understand the rationale for the B771/B774 proposal. We appreciate the opportunity to continue our dialogue once we receive the groundwater modeling report, backfill design, and the final land configuration plan for this area.

Sincerely yours,

Al Nelson
Rocky Flats Coordinator

cc: Sam Dixion, City Councillor, City of Westminster
Ron Hellbusch, Director Public Works and Utilities, City of Westminster
Hank Stovall, City Councilor, City & County of Broomfield
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